

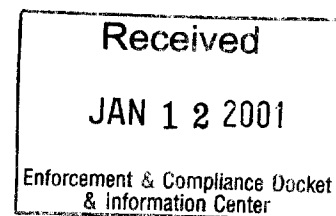
Safe Drinking Water Act Provisions on Reporting

Introduction

The SDWA was enacted by Congress in 1974 to control harmful contaminants in tap water and to protect underground sources of drinking water from improper underground injection. Tap water from public water systems must meet the national primary drinking water regulations which prescribe maximum contaminant levels (MCLs) or treatment techniques. EPA is required to set MCLs as close as possible to recommended maximum contaminant level goals, mandating the use of best available technology. EPA must publish maximum contaminant level goals for drinking water contaminants determined to have an adverse effect on the health of humans based on criteria laid out in the statute. Because drinking water has historically been a matter of local concern, the law also authorizes EPA to delegate to the states the responsibility for implementing drinking water programs that achieve protection levels at least as stringent as the federal program.

In 1986, Congress amended the SDWA, requiring EPA to increase its regulatory and enforcement efforts. These amendments specify that many new drinking water standards must be issued within the first few years, followed by 25 additional standards every three years. In attempting to increase enforcement and compliance, EPA encountered substantial resource constraints and missed several deadlines. As a result of this pressure on EPA and the desire to provide financial assistance to water suppliers, Congress passed the SDWA Amendments of 1996. The 1996 Amendments withdrew the provisions mandating 25 new standards every three years and instead gave EPA flexibility to decide which contaminants to regulate, based on occurrence data, risk assessment, and cost-benefit considerations, along with requiring annual "consumer confidence reports" by all suppliers of drinking water.

The amended SDWA now has six parts. Part A contains definitions covering the entire statute. Part B provides for the promulgations of national drinking water regulations and their enforcement, and allows for variances and exemptions from those regulations. Part B also gives primary enforcement of drinking water regulations to states but allows the Administrator to issue orders requiring public water systems to comply with regulations and to commence a civil action. Part C deals with the protection of underground sources of drinking water. The Administrator is required to publish regulations covering the subsurface placement of fluids by well injection, and primary enforcement responsibility is assigned to the states, with provision for EPA action if the states are delinquent in enforcing the regulations. Part D permits the Administrator to take immediate action in emergency situations; and Part E contains general provisions, including a method to ensure the availability of chemicals needed for water treatment. Other provisions under this part prescribe research and technical assistance programs, grants for study and demonstration projects, and methods of recordkeeping and inspections. Part F contains additional requirements to regulate the safety of drinking water, focusing primarily on the issue of lead contamination in school drinking water.



The statute does not pose any outright barriers to electronic reporting. There is no language that specifies that electronic reporting cannot be done. Several potential barriers to electronic reporting were identified that require something to be done in a paper format, including: requiring the Administrator to notify specific people in writing, sending a letter or document by certified mail, submitting written data, comments, statements, records, or notices, and providing confidential information or documents. This language does not necessarily preclude these activities from being done electronically as well, but it is specified that the activities must be done in a certain way. There are also several places where language in the statute has an ambiguous effect on electronic reporting. These include whether sending a copy of a document could include an electronic copy, whether documentation could include electronic documents, whether evidence could include electronic information, and if when a document must be published it could be done electronically. Most of this language could be interpreted to include electronic formats.

Part B, Public Water Systems: Section 1411-1416

Section 1413 allows for states to have primary enforcement responsibility for public water systems as long as they have adopted certain procedures and standards established in this section. Each state must adopt and implement a plan that includes specifications for record-keeping, reporting and monitoring. This section also prescribes the manner by which a state may apply for primary enforcement responsibility pursuant to regulations prescribed by EPA. Section 1413(a) does not seem to present any barrier to electronic reporting because there is no specification as to how the reporting, monitoring and record-keeping should be accomplished.

Section 1413(a)(1), (2), and (3) State Programs and Enforcement Responsibility - - Monitoring, reporting and recordkeeping	No barrier
(1) (...) a State has primary enforcement responsibility for public water systems during any period for which the Administrator determines (...) that such State has adopted drinking water regulations that are no less stringent than the national primary drinking water regulations (...) (2) has adopted and is implementing adequate procedures for the enforcement of such State regulations , including conducting such monitoring and making such inspections as the Administrator may require by regulation; (3) will keep such records and make such reports with respect to its activities under paragraphs (1) and (2) as the Administrator may require by regulation;	

Section 1413(b)(1) provides an opportunity for the Administrator to specify how the state can apply for primary enforcement responsibility, which could be used to adapt electronic reporting for the states' monitoring, reporting and recordkeeping.

Section 1413(b)(1) EPA Rulemaking	No barrier
(1) The Administrator shall, by regulation (...), prescribe the manner in which a State may apply to the Administrator for a determination that the requirements of paragraphs (1), (2), (3), and (4) of subsection (a) of this section are satisfied with respect to the State	

A potential barrier to electronic reporting exists in section 1413(b)(1) and (2) in terms of the written notification that must be given from the Administrator to the state regarding the promulgation of regulations as well as notification denying a state primary enforcement responsibility.

Section 1413(b)(1) and (2) Regulations - Submission of application	Potential barrier
(1) The Administrator shall promptly notify in writing the chief executive officer of each State of the promulgation of regulations under this paragraph. Such notice shall contain a copy of the regulations and shall specify a State's authority under this subchapter when it is determined to have primary enforcement responsibility for public water systems.	
(2) When an application is submitted in accordance with the Administrator's regulations under paragraph (1), the Administrator shall within 90 days of the date on which such application is submitted (A) make the determination applied for, or (B) deny the application and notify the applicant in writing of the reasons for his denial.	

Under Section 1414, during a period when a state has primary enforcement responsibility and a public water system (not granted a variance or exemption) is out of compliance with national primary drinking water regulations, EPA must notify the state and public water systems and assist the system to come into compliance. If the system does not come into compliance, the Administrator can commence a civil action. Section 1414 also requires a public water system to give notice to persons served by that system of any failure on the part of the public water system to comply with an applicable maximum contaminant level or treatment technique or to perform required monitoring. The Administrator is required through rulemaking to specify the manner, frequency, form, and content of notice. There is no language in section 1414(a) that provides a barrier to electronic reporting because the method of notification is not specified.

Section 1414(a)(1)(A)(ii) Notice to State and Public Water System	No barrier
(a) Whenever the Administrator finds during a period during which a State has primary enforcement responsibility for public water systems (...) that any public water system - (ii) for which a variance (...) or an exemption (...) is in effect, does not comply with any schedule or other requirement imposed pursuant thereto, he shall so notify the State and such public water system	

The effect of section 1414(c) on electronic notification is ambiguous. It specifies that notification must include circulation in a newspaper and individual mailings, but it also may provide an opportunity for electronic reporting because it specifies that press releases to electronic media must also be sent out. This section seems to allow for at least one method of notification to be electronic.

Section 1414(c) Notice to Persons Served	Ambiguous
(c) Each owner or operator of a public water system shall give notice of each of the following to the persons served by the system: (...) Notification of violations (...), whenever appropriate, shall also include a press release to electronic media	

Section 1414(c)(2)(B) also provides an opportunity for electronic reporting because it allows the Administrator to promulgate rules for how notification should be given by EPA and the states.

Section 1414(c)(2)(B) Form, Manner and Frequency of Notice - Rulemaking	No barrier
(2) (...) The Administrator shall, by regulation, and after consultation with the States, prescribe the manner, frequency, form, and content for giving notice under this subsection.	

Section 1414(g)(2) requires that a copy of any administrative order be sent to the appropriate state agency and corporate officers. It is ambiguous as to whether a copy of an order could be sent electronically.

Section 1414(g)(2) Administrative Order Requiring Compliance	Ambiguous
(2) (...) A copy of any order issued under this subsection shall be sent to the appropriate State agency of the State involved if the State has primary enforcement responsibility for public water systems in that State. (...) In any case in which an order under this subsection is issued to a corporation, a copy of such order shall be issued to appropriate corporate officers.	

Section 1415(a) allows a state which has primary enforcement responsibility to grant one or more variances from an applicable drinking water standard to public water systems that cannot meet the requirements respecting the maximum contaminant levels for a certain contaminant. Before granting a variance, a state must find that the variance will not result in an unreasonable health risk. A state is required to notify the EPA of all variances that it grants. It is ambiguous as to whether a state could notify the Administrator electronically because of the specification to provide documentation of the need for a variance, but EPA's regulations implementing this section could allow for both the notice and the documentation to be provided by a state electronically.

Section 1415(a)(1)(C) Notice to Administrator	Ambiguous
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(C) (...) The **State shall promptly notify the Administrator** of all variances granted by it. Such notification shall contain the reason for the variance (and in the case of a variance under subparagraph (A), the basis for the finding required by that subparagraph before the granting of the variance) and **documentation of the need** for the variance.

Section 1416 allows for a state with primary drinking water enforcement responsibility to exempt any public water system within its jurisdiction from any requirement respecting a maximum contaminant level and/or any treatment technique requirement of an applicable drinking water standard based on certain criteria. Each state that grants an exemption is required to notify EPA. Each system wanting to receive an exemption must apply to the appropriate state authority. In section 1416(c), as with section 1415(a), it is ambiguous as to whether a state could notify the Administrator electronically depending upon the documentation of the need for the exemption.

Section 1416 (c) Notice to Administrator	Ambiguous
Each State which grants an exemption under subsection (a) of this section shall promptly notify the Administrator of the granting of such exemption. Such notification shall contain the reasons for the exemption (...) and document the need for the exemption.	

Section 1417 requires that any pipe, solder, or flux used after June 19, 1986 be lead free and that public water systems must identify and provide notice to persons that may be affected by lead contamination of their drinking water. Section 1417(a)(2) provides an opportunity for electronic notification by specifying that the Administrator shall decide the manner and form by which to provide the notification.

Section 1417 (a)(2)(A), (a)(2)(A)(ii), and (a)(2)(B) Prohibition on Use of Lead Pipes, Solder, and Flux	No barrier
<p>(A) Each public water system shall identify and provide notice to persons that may be affected by lead contamination (...).</p> <p>(ii) (...) The notice shall be provided in such manner and form as may be reasonably required by the Administrator. (...).</p> <p>(B) Notice under this paragraph shall provide a clear and readily understandable explanation of (...).</p>	

Part C, Protection of Underground Sources of Drinking Water: Sections 1421-1428

Section 1421 requires the Administrator to propose regulations for state underground injection control (UIC) programs that contain minimum requirements for effective programs to prevent underground injection which endangers drinking water sources. This section also authorizes states to issue temporary permits for underground injection. Section 1421(b) specifies that the EPA regulations must include requirements for inspection, monitoring, recordkeeping and reporting. This does not pose a barrier to performing these tasks electronically because there is

no specification as to how it should be done.

1421(b)(1)(C) Minimum Requirements - Rulemaking, reporting, and recordkeeping	No barrier
(b) (1) Such regulations shall require that a State program, in order to be approved under section 300h-1 of this title (C) shall include inspection, monitoring, recordkeeping, and reporting requirements	

Section 1421(c) requires the Governor of a state to apply for authorization to issue temporary permits for underground injection. The language in this section does not provide a barrier to applying for authorization or issuing temporary permits electronically.

1421(c)(1) and (2) Temporary Permits	No barrier
(c) (1) The Administrator may, upon application of the Governor of a State which authorizes underground injection by means of permits, authorize such State to issue (...) temporary permits for underground injection (...) (2) The Administrator may, upon application of the Governor of a State which authorizes underground injection by means of permits , authorize such State to issue (...) one or more temporary permits each of which is applicable to a particular injection well	

Section 1422 requires the Administrator to publish in the Federal Register a list of each state in which an UIC program may be necessary to assure that underground injection will not endanger drinking water sources. Section 1422(b) requires each state listed in the Federal Register to submit an application to the Administrator which shows that the state keeps specific records and makes certain reports.

Section 1422(b)(1)(A) State Applications - Reporting and recordkeeping	No barrier
(A) Each State listed under subsection (a) of this section shall (...) submit to the Administrator an application which contains a showing satisfactory to the Administrator that the State (ii) will keep such records and make such reports with respect to its activities under its underground injection control program as the Administrator may require by regulation.	

This section also specifies that, in the case of any amendment of a state drinking water regulation under Part C, the state shall submit a notice to the Administrator. This section does not provide a

barrier to the electronic submission of an application or notice because the form and manner of submission is not specified. This section allows the Administrator to specify the form and manner of submission of the notice, which provides an opportunity for EPA to authorize electronic methods of notification and of documenting the adequacy of a state UIC program.

Section 1422(b)(1)(B) Notice to Administrator	No barrier
(B) Within 270 days of any amendment (...) each State listed under subsection (a) of this section shall submit (in such form and manner as the Administrator may require) a notice to the Administrator containing a showing satisfactory to him that the State underground injection control program meets the revised or added requirement.	

Section 1423 requires the Administrator to notify a state and a person of any violation of a state UIC program when a state has primary enforcement responsibility. If the state or person does not comply within a specified time period, the Administrator must issue an order requiring compliance or commence a civil action. There is no barrier to adopting electronic technology to notify a state and a violator or to issue an order under this section.

Section 1423(a)(1) Notice to State and Violator	No barrier
(1) he shall so notify the State and the person violating such requirement. If beyond the thirtieth day after the Administrator's notification, the State has not commenced appropriate enforcement action, the Administrator shall issue an order under subsection (c) of this section requiring the person to comply with such requirement or the Administrator shall commence a civil action under subsection (b) of this section.	

Section 1423(a)(6) allows any person against whom an order is issued to file an administrative appeal. It specifies that the appellant must send a copy of the appeal by certified mail to the Administrator and U.S. attorney general, which provides a potential barrier to electronic notice of the appeal.

Section 1423 (a)(6) Issuance of Administrative Order	Potential barrier
(6) Appellant shall simultaneously send a copy of the appeal by certified mail to the Administrator and to the Attorney General. The Administrator shall promptly file in such court a certified copy of the record on which such order was imposed.	

Section 1424 allows any person to petition the Administrator to have an area of a state designated as an area in which no new underground injection well may be operated during the time before an underground injection control program takes effect. No language in this section specifies how the petition must be submitted, which could provide an opportunity for electronic submission. However, this section also allows for interested persons to submit written data, views, or arguments about the petition. This language requiring "written data" may provide a potential barrier to submitting this information electronically.

Section 1424(a)(2) Well Operation Permit	Potential barrier
(2) Upon receipt of a petition under paragraph (1) of this subsection, the Administrator shall publish it in the Federal Register and shall provide an opportunity to interested persons to submit written data , views, or arguments thereon.	

Section 1425 applies to the underground injection of fluids brought to the surface in connection with the production or storage of natural gas. States may seek the Administrator's approval for their UIC programs under this section in lieu of the procedure under section 1422. A state must demonstrate that a specific portion of its program meets the requirements of section 1425(a). If the Administrator revises or amends the EPA regulations, a state must show that its program complies with the new regulations under section 1425(b). The requirements include adequate recordkeeping and reporting. The language in this section does not pose a barrier to electronic recordkeeping and reporting, which could be authorized by EPA's regulations for state UIC programs under 40 CFR Part 144.

Section 1425(a) and (b) Approval of State Underground Injection Control Programs	No barrier
<p>(a) (2) any underground injection for the secondary or tertiary recovery of oil or natural gas (...) the State may demonstrate that such portion of the State program meets the requirements of subparagraphs (A) through (D) of section 300h(b)(1) of this title and represents an effective program (including adequate recordkeeping and reporting) to prevent underground injection which endangers drinking water sources.</p> <p>(b) If the Administrator revises or amends any requirement of a regulation under section 300h of this title (...) the State may demonstrate that (...) the State program meets the requirements of subparagraphs (A) through (D) of section 300h(b)(1) of this title and represents an effective program (including adequate recordkeeping and reporting) to prevent underground injection which endangers drinking water sources.</p>	

Section 1426 specifies that the Administrator shall modify EPA regulations for Class 1 injection wells to identify monitoring methods. The Administrator is required to determine the appropriate manner of monitoring at different locations to detect fluid migration into underground sources of drinking water. The language in this section does not specify any monitoring methods and therefore is probably not a barrier to using electronic monitoring and reporting technology.

Section 1426 Monitoring Fluid Migration	No barrier
<p>(...) the Administrator shall modify regulations issued under this chapter for Class I injection wells to identify monitoring methods (...). (...) the Administrator, or delegated State authority, shall determine the applicability of such monitoring methods, wherever appropriate, at locations and in such a manner as to provide the earliest possible detection of fluid migration (...).</p>	

Section 1427 establishes procedures for development, implementation, and assessment of demonstration programs designed to protect critical sole-source aquifer protection areas. It authorizes any state, municipal or local government, political subdivision, or planning entity that identifies a critical aquifer protection area over which it has jurisdiction to apply to the Administrator for the selection of such area for a demonstration program and submit a comprehensive plan for protecting the aquifer. The application and plan must include certain information, but there is no language in this section that creates a barrier to the electronic submission of the application or plan.

Section 1427 Application and Comprehensive Plan	No barrier
<p>(c) Any State, municipal or local government or political subdivision thereof or any planning entity (...) may apply to the Administrator for the selection of such area for a demonstration program under this section. (...) Applicants, other than the Governor, shall submit the application for a demonstration program jointly with the Governor. (...).</p> <p>(f) (1) The objective of a comprehensive management plan submitted by an applicant under this section shall be to maintain the quality of the groundwater in the critical protection area (...). Each of the following elements shall be included in such a protection plan (...).</p>	

Section 1428 requires each state to adopt and submit to EPA a state program to protect wellhead areas from contaminants which may have any adverse effect on public health. Section 1428(a) does not contain any language that would provide a barrier to submitting this program electronically.

Section 1428(a) State Programs	No barrier
<p>(a) The Governor or Governor's designee of each State shall, within 3 years of June 19, 1986, adopt and submit to the Administrator a State program to protect wellhead areas within their jurisdiction</p>	

Section 1428(c) requires the Administrator to submit a written statement to a state program explaining reasons for disapproving their program. This language could provide a potential barrier to electronic submission of this statement.

Section 1428(c) Disapproval of State Wellhead Programs	Potential barrier
<p>(c) (1) If, in the judgment of the Administrator, a State program or portion thereof under subsection (a) of this section is not adequate to protect public water systems (...) the Administrator shall submit a written statement of the reasons (...)</p> <p>(2) Within 6 months after receipt of the Administrator's written notice (...), the Governor or Governor's designee, shall modify the program based upon the recommendations of the Administrator and resubmit the modified program to the Administrator.</p>	

Section 1428(g) requires states to submit a biennial status report to the Administrator. There are

no specifications as to how the report should be submitted and therefore there are no statutory barriers to electronic submission of these status reports.

Section 1428(g) Implementation of State Wellhead Programs	No barrier
(g) Each State shall make every reasonable effort to implement the State wellhead area protection program under this section within 2 years of submitting the program to the Administrator. Each State shall submit to the Administrator a biennial status report describing the State's progress in implementing the program. (...).	

Part D, Emergency Powers: Section 1431-1432

Section 1431 allows the Administrator to take actions necessary to protect public health, upon receiving information that a contaminant, which is present in or likely to enter a public water system or an underground source of drinking water, may present a danger to human health. This section also specifies that any person who violates or refuses to comply with any order issued by the Administrator may be subject to a civil penalty. Any person who tampers with a public water system must be imprisoned or fined. Section 1431(a) requires the Administrator to take action based on information received. This language does not specify how the information must be received, and therefore would allow EPA to authorize receipt of electronic information. If EPA uses electronic evidence in cases, it must be mindful of the issues surrounding the electronic submission of evidence to satisfy the different burdens of proof necessary for civil and criminal penalties.

Section 1431(a) Emergency Powers	No barrier
(A) (...) the Administrator, upon receipt of information (...) [that a contaminant has entered, or will enter, a public source of drinking water or that tampering has occurred]	

Part E, General Provisions: Section 1441-1458

Section 1441 allows for an application by a person treating water in any public water system, who determines that the amount of the substance necessary to treat the water effectively is not reasonably available, to the Administrator for a certification of need. Once this certification is issued, the President must issue an order requiring manufacturers, producers, processors, distributors and repackagers of the needed substance to provide it to the treatment system. Sections 1441(a) and (b)(1) do not provide barriers to electronic submission of applications for certification. By specifying that the application must be submitted in such form and manner as the Administrator requires, section 1441(b)(1) provides an opportunity for EPA to allow for electronic submission.

Section 1441(a) and (b)(1) Certification of Need Application	No barrier
<p>(a) (...) such person may apply to the Administrator for a certification (hereinafter in this section referred to as a "certification of need") that the amount of such chemical or substance which such person requires to effectively treat such water is not reasonably available to him or will not be so available when required for the effective treatment of such water.</p> <p>(b)(1) An application for a certification of need shall be in such form and submitted in such manner as the Administrator may require (...)</p>	

Section 1441(b)(2) provides a potential barrier to electronic notification and electronic submission of comments because it specifies that both must be in writing. Section 1441(c) does not pose a barrier to issuing a certification of need electronically.

Section 1441(b) and (c) Notice and Issuing Certificate of Need	Potential barrier
<p>(b)(2) Upon receipt of an application under this section, the Administrator shall (...) (B) notify in writing each person whom the President or his delegate (after consultation with the Administrator) determines could be made subject to an order required to be issued upon the issuance of the certification of need applied for in such application, and (C) provide an opportunity for the submission of written comments on such application. (...)</p> <p>(c) (1) (...) the Administrator shall issue a certification of need. (...)</p>	

Section 1443 allows the Administrator to make grants for states to carry out public water system supervision programs and underground water source protection programs. Sections 1443(a) and (b) provide an opportunity for electronic submission of state grant applications by allowing the Administrator to specify the form and manner in which to submit the application.

Section 1443(a) and (b) Applications for Grants	No barrier
<p>(a) (2) No grant may be made under paragraph (1) unless an application therefor has been submitted to the Administrator in such form and manner as he may require. (...)</p> <p>(b) (2) No grant may be made under paragraph (1) unless an application therefor has been submitted to the Administrator in such form and manner as he may require. No grant may be made to any State under paragraph</p>	

Section 1443(a)(6) also would allow the Administrator to notify the state electronically of the approval or disapproval of an application for a grant.

Section 1443 (a)(6) Applications for Grants	No barrier
<p>(6) The Administrator shall notify the State of the approval or disapproval of any application for a grant under this section (...)</p>	

Section 1445 requires every person who is a supplier of water and who is subject to primary drinking water regulations or UIC programs to maintain records, make reports, conduct monitoring, and provide information that the Administrator requires by regulation. This section also allows the Administrator, or someone designated by the Administrator, to enter and inspect regulated facilities. The inspector is allowed access to any records, reports, or information for the purpose of audit and examination. If the state has primary enforcement responsibility, the Administrator must notify the state agency of the reasons for such entry. State agencies which receive notice of an EPA inspection may not inform the person whose property is proposed to be entered. In addition, this section specifies that the Administrator shall consider as confidential any information that, if made public, would divulge trade secrets or secret processes. Section 1445(a) does not contain any language that would provide a barrier to maintaining records, making reports, conducting monitoring, or providing information or notification using electronic technology.

Section 1445(a)(1) Provision of Information to Administrator	No barrier
<p>(a)(1) Every person who is a supplier of water, who is or may be otherwise subject to a primary drinking water regulation prescribed under section 300g-1 of this title or to an applicable underground injection control program (...) shall establish and maintain such records, make such reports, conduct such monitoring, and provide such information as the Administrator may reasonably require by regulation to assist the Administrator in establishing regulations (...)</p> <p>(4) (...) Public water systems conducting monitoring or unregulated contaminants pursuant to this section shall provide the results of such monitoring to the primary enforcement authority.</p> <p>(5) Notification of the availability of results of the monitoring programs (...) shall be given to the persons served by the system and the Administrator</p>	

Section 1445(b) provides a potential barrier to electronic notification of inspection to a facility or state agency because it specifies that the notice must be written. It is not clear whether the records, files, papers, processes, and controls, as well as records, reports, and information that are subject to inspection could be in an electronic format.

Section 1445(b)(1) and (2) Entry of Establishments	Potential barrier
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(b)(1) (...) the Administrator, or representative of the Administrator duly designated by him, upon presenting appropriate credentials and a **written notice** to any supplier of water (...) is authorized to enter any establishment, facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this subchapter, including for this purpose, **inspection**, at reasonable times, **of records, files, papers, processes, controls and facilities** (...). The Administrator (...) shall have access for the purpose of audit and examination to any **records, reports, or information** of a grantee which are required to be maintained under subsection (a) of this section (...).

(2) (...) before **written notice** of such entry is made, the Administrator (...) **notifies** the State agency (...). No state agency which receives **notice** under this paragraph of an entry proposed to be made under paragraph (1) may use the information contained in the notice to inform the person whose property is proposed to be entered (...).

Section 1445(d) raises a potential barrier to whether papers, books, documents, and information could be in an electronic format because it imposes the requirement to protect trade secrets.

Section 1445(d)(1) Confidential Information	Potential barrier
<p>(d)(1) (...) upon a showing satisfactory to the Administrator by any person that any information required under this section from such person, if made public, would divulge trade secrets or secret processes of such person, the Administrator shall consider such information confidential (...)</p> <p>(2) (...) For purposes of this subsection the term "information required under this section" means any papers, books, documents, or information, or any particular part thereof, reported to or otherwise obtained by the Administrator under this section.</p>	

Section 1447 requires each federal agency having jurisdiction over any federally owned or maintained public water system or engaged in any activity that could endanger drinking water to comply with all federal, state, and local requirements, administrative authorities, and process and sanctions respecting the provision of safe drinking water and underground injections program. The Administrator can waive compliance only upon request of the Secretary of Defense and upon a determination of the President that a waiver is necessary in the interest of national security. Section 1447(a) does not provide a barrier to electronic recordkeeping, reporting, or permitting.

Section 1447(a) General Reporting and Recordkeeping	No barrier
<p>(a) (...) shall apply (...) to any requirement whether substantive or procedural (including any recordkeeping or reporting requirement, any requirement respecting permits...)</p>	

Section 1447(b) may provide a barrier to making the record available electronically because the language specifies that it should be written.

Section 1447(b) Compliance Waiver	Potential barrier
<p>(b) (...) The Administrator shall maintain a written record of the basis upon which such waiver was granted and make such record available for in camera examination (...).</p>	

Section 1448 allows for petitions to be filed for judicial review of EPA actions to establish of national primary drinking water regulations or any other action of the Administrator under the

Section 1448(c) Additional Evidence for Judicial Review	Ambiguous
(c) (...) if any party applies to the court for leave to adduce additional evidence and shows to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (...) to be taken before the Administrator (...). The Administrator may modify his findings as to the facts, or make new findings, by reason of the additional evidence (...).	

Section 1449 allows any person to bring a civil action on his own behalf against any person in violation of any requirement in this subchapter or against the Administrator when there is a failure to perform any act or duty under this subchapter. This section provides several conditions under which a civil action may not be commenced. One of these conditions, in section 1449(b)(2), specifies that notice must be given by the plaintiff in a manner specified by the Administrator by regulation. This language could provide an opportunity for electronic notification.

Section 1449(b) Conditions for Commencement of Civil Action	No barrier
(b) No civil action may be commenced - (...) (2) under subsection (a)(2) of this section prior to 60 days after the plaintiff has given notice of such action to the Administrator. Notice required by this subsection shall be given in such manner as the Administrator shall prescribe by regulation.	

Section 1450 authorizes the Administrator to prescribe such regulations as are necessary to carry out his functions under the subchapter. Section 1450(h) requires the Administrator to submit a report on the activities of the Agency and recommendations for legislation to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of representatives. There is no barrier to writing and submitting the report electronically.

Section 1450(h) Report to Congress and House of Representatives	No barrier
Not later than April 1 of each year, the Administrator shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives a report (...).	

Section 1450(i)(2)(B)(i) specifies that when a complaint is filed, the Secretary shall conduct an investigation of the violation and within 30 days of the complaint, complete the investigation and notify in writing the complainant and the person alleged to have committed such violation. Because it is specified that the notification be in writing, this could pose a potential barrier to electronic notification.

Section 1450(i)(2)(B)(i) Filing a Complaint	Potential barrier
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(...) within 30 days of the receipt of such complaint, the Secretary shall complete such investigation and shall **notify in writing** the complainant (...) and the person alleged to have committed such violation of the results of the investigation (...).

Part F, Additional Requirements to Regulate the Safety of Drinking Water: Sections 1461-1465

Section 1463 requires the Administrator to identify and publish a list of each brand and model of drinking water cooler which is not lead free. The Administrator must continue to gather information regarding drinking water coolers and revise and republish the list from time to time. This section makes it illegal for any person to sell or manufacture a listed drinking water cooler and includes both civil and criminal penalties. Section 1463(a) requires the Administrator to publish a list, but does not specify the method of publication and could provide an opportunity for electronic publication.

Section 1463(a) Publication of Lists	No barrier
(a) (...) the Administrator shall publish a list (...).	

Section 1464 requires the administrator to distribute to the States a list of each brand and model of drinking water cooler identified in Section 1463(a). The Administrator must publish a guidance document and testing protocol to assist schools in determining the source and degree of lead contamination in school drinking water supplies and in remedying such contamination. Each state must disseminate this information to local educational agencies, private nonprofit elementary or secondary schools and to day care centers. Each state must also establish a program to assist local educational agencies in testing for, and remedying, lead contamination in drinking water. Section 1464(a) provides an opportunity for electronic distribution of a list because no method for distribution is specified.

Section 1464(a) Distribution of Drinking Water Cooler List	No barrier
(a) (...) the Administrator shall distribute to the States a list (...)	

It is ambiguous as to whether publication of a guidance document and a testing protocol, as specified in Section 1464(b) could be done electronically, but EPA could also use this guidance and testing protocol as an opportunity to authorize electronic reporting.

Section 1464(b) Guidance Document and Testing Protocol	Ambiguous
(b) The Administrator shall publish a guidance document and a testing protocol (...)	

Section 1464(c) provides an opportunity for electronic dissemination of information because no method is specified.

Section 1464(c) Dissemination to Schools	No barrier
(c) Each State shall provide for the dissemination to (...)	

Section 1464(d) requires that a copy of the results of any testing for lead be available in the administrative offices of the local education agency for inspection by the public. It is ambiguous as to whether such a copy could be in an electronic format, but the statute seems to imply a paper copy.

Section 1464(d)(2) Remedial Action Program, Public Availability	Ambiguous
(d)(2) A copy of the results of any testing (...)	

Relationship to Regulations

EPA has used the statutory authority in Sections 1401, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1445, and 1450 to develop regulations for reporting, recordkeeping, and monitoring of drinking water quality. Applicable regulations in 40 CFR § 141 include: § 141.31 requires suppliers of water to report to the State the results of any required test measurement or analysis; § 141.32 requires owners or operators of a public water system which fails to comply with the applicable maximum contaminant level or treatment technique to notify persons served by the system; § 141.33 requires any owner or operator of a public water system to maintain specified records on, or near its premises; § 141.51- § 141.55 establishes the requirements for the content and submission of annual Consumer Confidence Reports that community water systems must deliver to their customers; and § 141.90 requires all water systems to report required information about tap water samples to the state. Applicable regulations in 40 CFR § 142 include: §142.14 requires states that have primary enforcement responsibility to maintain records of laboratory reports, tests, measurements, analyses, decisions and determinations performed on each public water system to determine compliance with applicable provisions of state primary drinking water regulations; and § 142.15 requires these states to submit to the Administrator quarterly reports, annual reports, and special reports. These aforementioned regulations require a high volume of reporting and recordkeeping which could be the focus of conversion to an electronic format, but adoption of electronic reporting would require only changes to EPA's regulations because none of the relevant statutory sections preclude the use of electronic methods.